CLAIMS :

1.   A method for encoding a sequence of video data according to a process in which several types of data are identified, said data consisting of so-called Video Object Planes (VOPs) that are either intra coded VOPs (I-VOPs), coded using information only from themselves, or predictive coded VOPs (P-VOPs), coded using a motion compensated prediction from a past reference VOP, or bidirectionally predicted VOPs (B-VOPs), coded using a motion-compensated prediction from past and future reference VOPs, said encoding method including a coding step of each VOP and, before said coding step, a motion estimation step performed between the current VOP and the previous one, said motion estimation step itself comprising a decision process concerning the type of VOP to be coded and based on the sub-steps of :

- carrying out a motion estimation between a VOP number N (VOP N) and the previous one (VOP N-1) ;

- on the basis of said motion estimation, computing a so-called coherence factor, provided for quantifying the sequence motion ;

- on the basis of a comparison of said coherence factor with a predetermined threshold, taking a final decision on the type of the current VOP, said current VOP being a B-VOP or not according to the value of said coherence factor with respect to said threshold.

2.   An encoding method according to claim 1, in which said coherence factor is expressed as the ratio of the sum of absolute differences (SAD) between motion vectors resulting from said motion estimation, for a macroblock and its predecessor in the same VOP, with the similar sum for the previous VOP.